

Math Textbook Reviews:

Section 1, August 2014

Publisher: Houghton Mifflin

Textbook Title: Algebra 1, Geometry, Algebra 2
Integrated 1, 2, and 3

Grade band: High school CCSS

Focus Metrics	
A. In any single course, materials are designed so teachers and students spend at least 50% of their time on the Widely Applicable Prerequisites (see Appendix B).	Yes
B. Topics from future courses are clearly identified as such in the materials and do not detract from focus.	Yes
C. Topics from earlier grades/courses are used to support grade-level work. Content from prior grades/courses is clearly indicated as such.	Yes
Does this textbook meet the requirements for focus?	Yes
Justification/Notes: A. The textbook focuses on the major work of the course. All specified TN Core I standards are incorporated, and the major focus is on Widely Applicable Prerequisites. B. The few topics in the course not specified in the standards (e.g. - Residuals, Normal Distribution) are supportive of the major content and do not detract from the focus. They are identified in the CCSS Correlation provided on pages CC2 – CC9 of the teacher edition. C. Topics from earlier grades and prerequisite skills are clearly identified in the section “Are You Ready?” at the beginning of each lesson. These topics and skills are used to support course-level work.	

Rigor Metrics	
A. For the widely applicable prerequisites, the three aspects of rigor are given full attention: conceptual understanding, procedural fluency, and application.	Yes
B. High quality problems and questions designed to invite exploration and support conceptual understanding are included for content standards and clusters that explicitly call for it. A variety of conceptual problems enable students to connect mathematical ideas and representations, and transfer understandings to new situations.	Yes
C. Materials support the development of fluency, including opportunities to practice algebraic manipulation and computation, appropriately apply tools, and use technology. Sometimes problems are purely procedural, none are based on non-mathematical tricks or mnemonics.	Yes
D. Students are given opportunity to apply mathematical knowledge and skills for standards that set a clear expectation modeling. A variety of grade-level appropriate problems provide students the opportunity to apply mathematical models in a variety of contextual situations using knowledge and skills articulated in the standards prior to or during the current course.	Yes
Does this textbook meet the requirements for rigor?	Yes
Justification/Notes: B. The first three phases of each lesson, “Explore, Explain, and Elaborate,” develop and support	

students' conceptual understanding. A variety of problems are provided, including contextual problems. There is a strong emphasis on student explanation and making connections between concepts. C. The "Evaluate" phase of each lesson includes numerous problems. These include procedural problems, application problems, and problems that elicit higher-order thinking skills. The emphasis is on making conceptual connections, not memorizing "tricks." D. Every lesson contains application problems that reflect varying levels on the Depth of Knowledge scale.

Were both non-negotiables in Section I met? Yes

Optional Additional Comments from Reviewers:

Grade	Comments
	Integrated 1: Several topics from future courses are included and identified. The topics are identified as footnotes in the Correlation to the Common Core State Standards, provided at the front of the teacher's edition.

Math Textbook Reviews: Section 2

Publisher: Houghton Mifflin

Textbook Title: Algebra 1, Geometry, Algebra 2, Integrated 1, Integrated 2, and Integrated 3

Grade band: High school CCSS

Alignment Metrics	
A. Materials connect the math practices to the content standards in meaningful and intentional ways, preferentially for Widely Applicable Prerequisites. The development of the practice is well-grounded in content and not in isolation.	2
B. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Problems and activities present opportunities for students to make use of and exhibit the practices as they work on content.	2
C. Particular attention is given to: MP3 - Construct viable arguments and critique the reasoning of others: Students are encouraged to create and test mathematical arguments, make generalizations and provide justifications, particularly in standards that explicitly call for it, in a manner reasoning appropriate to the grade level.	2
D. Particular attention is given to: MP4 - Model with mathematics: Students should be given opportunities to apply mathematics learned in novel situations, with an appropriate tradeoff between the complexity and novelty of the problem and the newness of the content they are asked to use. Modeling problems should draw heavily from major work of the grade level or securely-held content, integrated across multiple domains/clusters where appropriate. Standards with explicit expectations for modeling are indicated with a star (*).	2

Coherence Metrics	
A. Connections are made within a course between clusters and domains, where these connections are appropriate and natural, as set forth by the Standards.	2
B. For materials in a series, content progressions reflect the progressions as seen in the Standards*, including the development of the practices. These progression connections are clearly indicated in the materials. Any discrepancies in content progressions enhance the required learning in each course and are clearly aimed at helping students meet the Standards as written.	2

Usability Metrics	
A. Materials support teachers In ways such as the following: planning (including ideas for pacing), introducing lessons, assessment types, vocabulary.	2
B. Materials are clear and easy to read for students, teachers, parents. The design and graphics do not distract from the mathematics.	2
C. Materials include supports for all learners, e.g., EL, students who are below grade level, advances students.	2

Sensitivity	
Please use the space below to note any concerns about sensitivity with this material.	n/a

